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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,390	01/22/2004	Michael Ebenhoch	ZAHFRI P598US	4858

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DAVIS & BUJOLD, P.L.L.C.  
FOURTH FLOOR  
500 N. COMMERCIAL STREET  
MANCHESTER, NH 03101-1151

EXAMINER
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LE, DAVID D

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/762,390

Applicant(s)

EBENHOCH, MICHAEL

Examiner

David D. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/26/04, 1/22/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This is the first Office action on the merits of Application No. 10/762,390, filed on 22 January 2004. Claims 8-14 are pending.

### **Documents**

2. The following documents have been received and filed as part of the patent application:
  - Information Disclosure Statement, received on 03/26/04
  - Information Disclosure Statement, received on 01/22/04
  - Foreign Priority Document, received on 01/22/04

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

### *Drawings*

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a differential, a transfer transmission, a setting device, servo assistance including a piston-cylinder system, and a mechanical conversion device must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**Claim 13:**

- Lines 1-2 recite the limitation "said setting devices". There is insufficient antecedent basis for this limitation in the claim.
- Line 2 recites the limitation "servo assistance". It is unclear whether this "servo assistance" is different from the one, which is previously recited on line 4 of claim 12.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO**

**01/84019 A1 in view of U. S. Patent No. 4,033,200 to Stockton**

Note:

To facilitate a better understanding as well as greater accuracy in explaining the following claim rejections, the examiner will refer to U. S. Patent No. 6,874,381 to Berger et al., which is the English version of the WO 01/84019 A1.

Claims 8-14:

**Berger** (i.e., Figs. 1a – 6b, column 4, line 61 – column 9, line 20) discloses an actuating arrangement for a gearbox comprising:

- A starting clutch (i.e., Fig. 5, element 502);
- A transmission input shaft (i.e., Fig. 5, element 503 or 504);
- A plurality of fixed gears situated on the transmission input shaft (i.e., Fig. 5);
- A first countershaft (i.e., Fig. 5, element 506);
- A second countershaft (i.e., Fig. 5, element 505);
- A plurality of idler gears mounted upon said first and second countershafts (i.e., Fig. 5);
- Wherein the gearbox includes six forward and one reverse speed ratios, which is arranged in the sequence of a second transmission gear (i.e., Fig. 5, element 508), a reverse gear (i.e., Fig. 5, element 514), a fourth transmission gear (i.e., Fig. 5, element 510), a sixth transmission gear (i.e., Fig. 5, element 512), a third transmission gear (i.e., Fig. 5, element 509), a first transmission gear (i.e., Fig. 5, element 507), and a fifth transmission gear (i.e., Fig. 5, element 511);
- A first shifting set (i.e., Fig. 5, vicinity of element 517);

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- A second shifting set (i.e., Fig. 5, vicinity of element 518);
- A third shifting set (i.e., Fig. 5, vicinity of element 515);
- A fourth shifting set (i.e., Fig. 5, vicinity of element 516);
- A reverse shaft (i.e., Fig. 5 element 519) having a first fixed gear (i.e., Fig. 5, element 513) and a second fixed gear (i.e., Fig. 5, element 514);
- Wherein each of the first, second, third, and fourth shifting sets includes an axially movable sliding sleeve (i.e., Fig. 5, elements 515, 516, 517, 518; column 8, lines 9-26);
- Wherein said sliding sleeve of the first, second third, and fourth shifting sets is actuatable by means of a setting device including a mechanical conversion device (i.e., Fig. 1a);
- Wherein a shift lever is moved in a shift gate of an H or multi-H (i.e., Figs. 6a and 6b); and
- Wherein Fig. 5 shows the end of the output shaft is in an area of the starting clutch (502).

**Berger** does not explicitly disclose:

- A synchronizer ring;
- One or more additional fixed gear mounted on a transmission output shaft; and
- Wherein the setting device is actuatable with a servo assistance having piston-cylinder system.

*Stockton* (i.e., Figs. 1-2; column 1, line 61 – column 4, line 51), on the other hand, teaches a multiple ratio power transmission comprising:

- A plurality of synchronizer clutches including synchronizer rings and shift forks (i.e., column 2, line 36 – column 4, line 32);
- An output gear (50) mounted on a countershaft 40);
- Wherein said output gear (50) meshes with gear (122), which is mounted on output shaft (148 or 150); and
- Wherein the synchronizer clutch is actuable by a servo actuator, which inherently includes a piston-cylinder system (i.e., column 1, lines 27-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Berger such that the shifting sets are the synchronizer clutches, actuable by servo actuators, in view of *Stockton*, in order to improve the shifting stability of the transmission.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Forsyth (U. S. Patent No. 5,743,141) teaches a compact six-speed transaxle as shown in Fig. 7.



- Ahluwalia et al. (U. S. Patent No. 5,927,145) teaches a compact manual transmission having six speed ratios as shown in Fig. 7.
- Fleishman et al. (U. S. Patent No. 6,067,870) teaches a compact six-speed manual transmission having synchronizers, as shown in Fig. 1.
- Janiszewski (U. S. Patent No. 5,906,132) teaches a motor vehicle gearbox as shown in Fig. 2.
- Foxton et al. (U. S. Patent No. 4,440,037) teaches a shift control mechanism for a change speed transmission as shown in Fig. 4.
- Fisher (U. S. Patent No. 4,461,188) teaches a multiple countershaft transmission as shown in Fig. 1.
- Japanese Patent No. JP406074305A teaches a six-speed transmission as shown in Fig. 1.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ddl

  
CHARLES A. MARMOR  
SUPERVISORY PATENT EXAMINER  
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